



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,778	09/29/2003	Volkert A. Zeijlemaker	P0010498.00	2478
27581	7590	05/15/2008		
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MINNEAPOLIS, MN 55432-9924			EXAMINER SMITH, RUTH S	
			ART UNIT	PAPER NUMBER
			3737	
			MAIL DATE	DELIVERY MODE
			05/15/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/673,778	Applicant(s) ZEIJLEMAKER, VOLKERT A.	
	Examiner Ruth S. Smith	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on February 7, 2008 has been entered.

Claim Objections

Claims 1-10,37,38 are objected to because of the following informalities: In claim 1, it is unclear as to the connection between the sensed electromagnetic radiation and the radiation bursts. Claims 37,38 appear to merely set forth a preamble of an MRI device without positively setting forth any structure of the device to provide the functions as set forth. Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 1-21,23-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as originally filed, failed to disclose that the IMD includes an automatic gain controlled amplifier. The specification discloses the use of sense amplifiers which do not inherently include automatic gain controlled amplifiers.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3737

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-21,23-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Foster et al (6,925,328). Foster et al disclose an IMD in combination with MRI, whereby some of the components of the IMD are disabled during an MRI scanning session. While Foster et al is silent with respect to the specific components of the circuitry of the IMD, the use of an AGC amplifier is an inherent part of its circuitry. The IMD can include an implantable pacemaker. The MRI sends out signals that are detected by the IMD and the signals are evaluated to determine whether or not to disable portions of the IMD. MRI inherently includes application of gradient magnetic fields. An operator who sets in the image sequence data into the MRI system controller or the microprocessor of the IMD can comprise the programmer which disables portions of the IMD. With regard to claims 5-8, Foster et al disclose timing of the IMD with the MRI system. With regard to claims 9,10, Foster et al disclose that the components are disabled for a time period and then are re-enabled following that time period. A signal received from the MRI system would inherently define "blanking" of components of the MRI system. Foster et al disclose the use of a counter which triggers a re-set function to re-enable the components of the IMD after a predetermined period of time.

Claim 22 is rejected under 35 U.S.C. 102(e) as being anticipated by Thompson et al. Thompson et al disclose an IMD having an electrical switch capable of performing the function set forth in the claim.

Claims 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Foster et al (6,925,328). Foster et al disclose an IMD in combination with MRI, whereby some of the components of the IMD are disabled during an MRI scanning session. The

components of the IMD are not positively set forth as part of the claimed invention and therefore are not given patentable weight.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-21,23-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foster et al (6,925,328) in view of Abrahamson et al. Foster et al disclose an IMD in combination with MRI, whereby some of the components of the IMD are disabled during an MRI scanning session. While Foster et al is silent with respect to the specific components of the circuitry of the IMD, Abrahamson et al disclose an IMD having an AGC amplifier as part of its circuitry. It would have been obvious to one skilled in the art to have modified Foster et al such that the IMD includes an AGC amplifier in that such is a well known expedient in the art in IMD circuitry. The IMD can include an implantable pacemaker. The MRI sends out signals that are detected by the IMD and the signals are evaluated to determine whether or not to disable portions of the IMD. MRI inherently includes application of gradient magnetic fields. An operator who sets in the image sequence data into the MRI system controller or the microprocessor of the IMD can comprise the programmer which disables portions of the IMD. With regard to claims 5-8, Foster et al disclose timing of the IMD with the MRI system. With regard to claims 9,10, Foster et al disclose that the components are disabled for a time period and then are re-enabled following that time period. A signal received from the MRI system would inherently define "blanking" of components of the MRI system. Foster et al disclose the use of a counter which triggers a re-set function to re-enable the components of the IMD after a predetermined period of time.

Response to Arguments

Applicant's arguments with respect to claims 1-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth S. Smith whose telephone number is 571-272-4745. The examiner can normally be reached on M-F 7:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 571-272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/
Primary Examiner, Art Unit 3737

RSS